

# PATENT ABSTRACTS OF JAPAN

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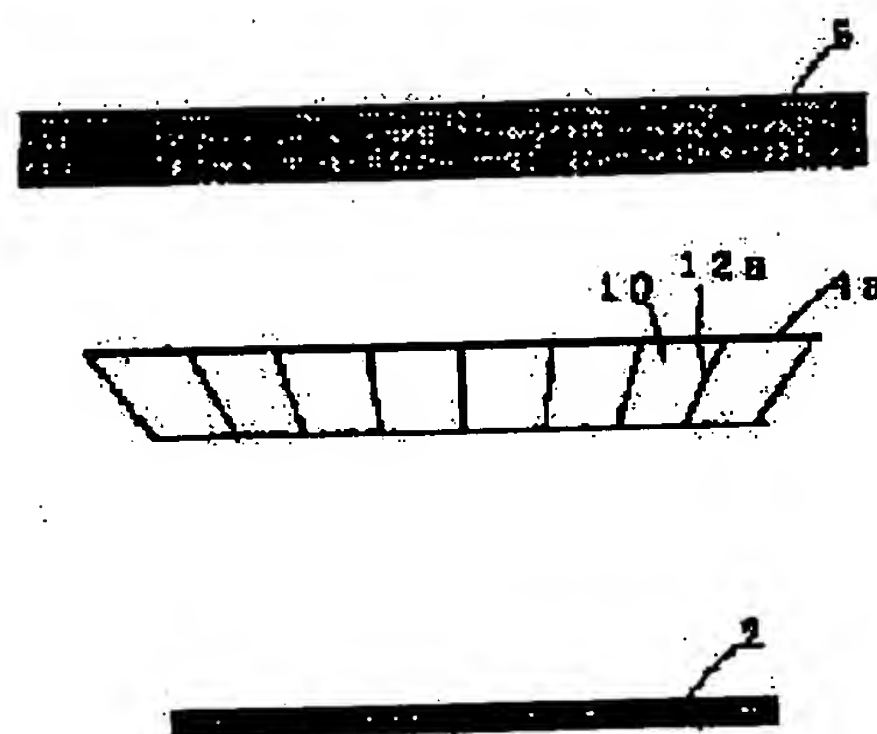
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## (54) SPUTTERING DEVICE AND COLLIMATOR USED THEREFOR

### (57)Abstract:

PROBLEM TO BE SOLVED: To eliminate the asymmetry of formed coating by a long distant sputtering method.

SOLUTION: The bulkhead 12a of the cell 10 of a collimator 4a is made oblique, and its angle is made wide as it closes from the center part to the circumferential part in the collimator 4a. The bulkhead 12a of the cell 10 of the collimator 4a is made slant in such a manner that the normal of the bulkhead on the circumferential side of the cell 10 orients not to the side of a substrate 2 but to the side of a target 6. In this way, since, in the circumferential part of a wafer 2, the effect of trapping the sputtered particles imparting asymmetry increases and the components at the shallow angles and the components having incident angles in the direction opposite to the gradient direction of the cell bulkhead 12a are hardly trapped, the effect of improving the asymmetry at the hall part is made higher than the case in which the cell bulkhead is vertical.



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